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The passage section forward of the mid-point of the port, and the nose section, are effectively inclined toward the longitudinal axis of the bolus and the tube. The passage section joins the nose section of the bolus at the forwardmost end of the side port on a transverse plane where the nose section is at a maximum thickness in a direction passing through the bolus axis and the center of the port. The plane is inclined rearwardly toward the port at an angle corresponding to the effective angle of incline of the curving passage section toward the bolus axis. The thickness of the nose section in this plane in the direction of the bolus axis and the port is 25% to 30% less than the outside diameter of the catheter tube.

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Please replace the paragraph beginning at line 6 of page 7 with the following rewritten paragraph: ✓

The nose section 57 has a slightly elliptical shape in cross-section on the plane P where it joins the passage section 56, as seen in FIGURE 5. The aforescribed configuration produces a maximum thickness of the nose section 57, in the direction of the port 69 and in the plane P which is 29% smaller than the outside diameter of the catheter tube 11. At the same time, as seen in FIGURES 1 and 2, the outermost periphery of the nose section 57 is, at 90, tangent to an imaginary cylinder defined by the outer surface of the tube 11 and the bolus passage section 56, the cylinder being seen in end view in FIGURE 2.

In the Claims

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Please cancel Claim 6.

Please amend Claim 1 as follows:

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1. (Amended) A blood vessel-catheter for insertion through a patient's vascular system, comprising:
 - a) a catheter tube and a bolus molded of resilient plastic;

b) said catheter tube including a body having a cylindrical wall through which a lumen extends to a distal end of the tube;

c) said bolus including a body having a connector section joined to said catheter tube at said distal end, a passage section and a nose section;

d) said nose section having an unperforated, rounded bullet-nose on it;

e) said passage section of said bolus containing an axially extending passage communicating at one end with said tube lumen and at another end with a port opening radially through the side of said bolus body;

f) said nose section being joined to said passage section at the forward end of said passage section and, where it joins said passage section, being off-set to one side of the longitudinal axis of said passage section and having a maximum thickness which is smaller than the outside diameter of the tube.

Please amend Claim 2 as follows:

2. (Amended) The catheter of Claim 1 further characterized in that:

a) said nose section, where it joins said passage section, has a center which is radially offset from the longitudinal axis of said passage section so that [whereby] a portion of the outer periphery of said nose section is [normally] substantially tangent with an imaginary cylinder containing the outer periphery of said passage section.

Please amend Claim 3 as follows:

3. (Amended) The catheter of Claim 1 further characterized in that:

a) said port extends around more than 180° of the circumference of said passage section.

Please amend Claim 4 as follows:

B.
a2

4. (Amended) The catheter of Claim 1 further characterized in that:
a) said bolus body includes a longitudinally extending stiffening arch formed outwardly of said passage section opposite said port.

Please amend Claim 7 as follows:

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7. (Amended) The catheter of Claim 1 further characterized in that:
a) said port has a trailing edge at the outer periphery of said passage section; and
b) said trailing edge is segmentally circular in cross-section.

Please amend Claim 8 as follows:

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8. (Amended) The catheter of Claim 2 further characterized in that:
a) said bolus body has opposite sides bracketing said port which taper radially inwardly toward the longitudinal axis of said passage section as they extend forwardly from said passage section into said nose section.

Please amend Claim 9 as follows:

9. (Amended) The catheter of Claim 8 further characterized in that:
a) said port has a trailing edge at the outer periphery of said passage section;
b) said radially inward taper of said sides beginning forwardly of said trailing edge.

Please amend Claim 10 as follows:

10. (Amended) The catheter of Claim 1 further characterized in that:
a) said tube contains a single lumen and said passage section contains a single passage.

Please amend Claim 11 as follows:

11. (Amended) A bolus for a blood vessel catheter, comprising:
- a) a generally cylindrical body including a passage section having a longitudinal axis and a nose section joined to said passage section;
 - b) said passage section containing a port opening radially outwardly through said body, transversely of said axis;
 - c) said passage section having a portion centered on said longitudinal axis and another portion which is, with said nose section, inclined to said longitudinal axis in the same radial direction as said port so that the center of said nose section is offset to one side of said longitudinal axis.

Please amend Claim 12 as follows:

12. (Amended) The bolus of Claim 11 further characterized in that:
- a) said nose section has an unperforated, bullet nose thereon; and
 - b) said nose section has an outermost extremity which, in one location, is substantially tangent to an imaginary cylinder containing the outermost periphery of said passage section.

Please amend Claim 14 as follows:

14. (Amended) The bolus of Claim 13 further characterized in that:
- a) said nose section has an unperforated, bullet nose thereon; and
 - b) said nose section has an outermost extremity which, in one location, is substantially tangent to an imaginary cylinder containing the outermost periphery of said passage section.